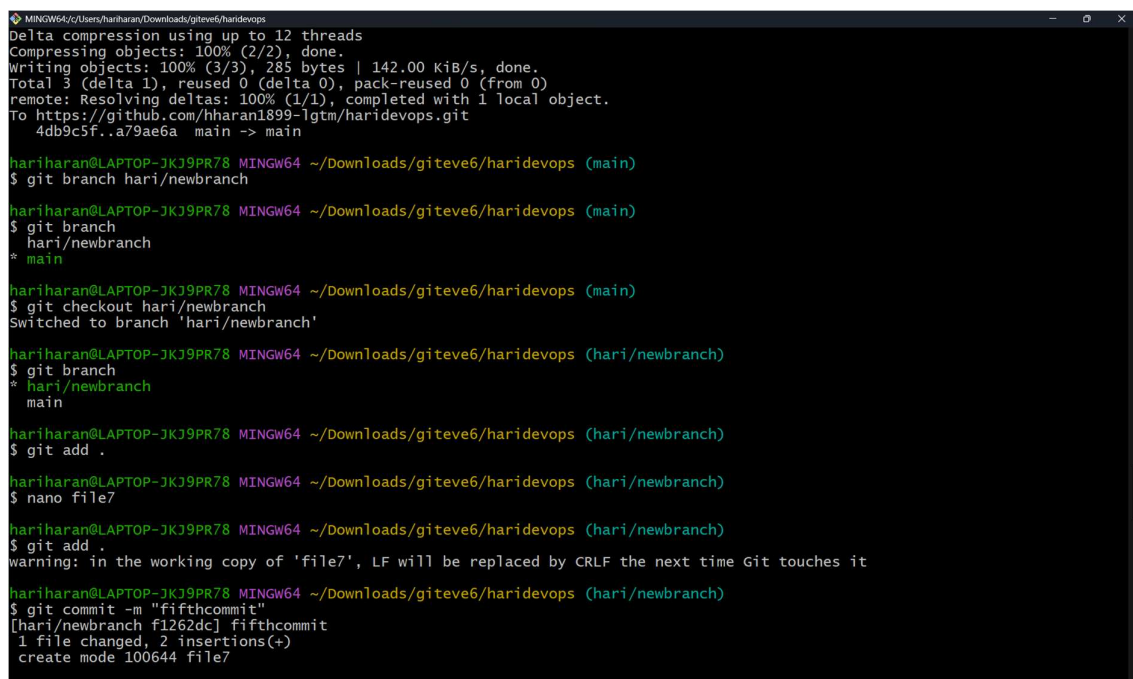


GIT BRANCHES , GIT REMOTE , GIT PULL , GIT MERGE , GIT REBASE

GIT BRANCHES

- Using “git branch <name>” command to create an new branch “git branch” command to check branch status “git checkout <branchname>” command to switch branch.

A terminal window showing a sequence of Git commands and their outputs. The user is in a directory ~/Downloads/giteve6/haridevops. The terminal shows the creation of a new branch 'hari/newbranch', switching to it, adding a file 'file7', and committing it. The output of the commands is as follows:

```
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 285 bytes | 142.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/hharan1899-1gtm/haridevops.git
4db9c5f..a79ae6a  main -> main

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (main)
$ git branch hari/newbranch

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (main)
$ git branch
  hari/newbranch
* main

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (main)
$ git checkout hari/newbranch
Switched to branch 'hari/newbranch'

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (hari/newbranch)
$ git branch
  hari/newbranch
* main

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (hari/newbranch)
$ git add .

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (hari/newbranch)
$ nano file7

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (hari/newbranch)
$ git add .
warning: in the working copy of 'file7', LF will be replaced by CRLF the next time Git touches it

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (hari/newbranch)
$ git commit -m "fifthcommit"
[hari/newbranch f1262dc] fifthcommit
1 file changed, 2 insertions(+)
create mode 100644 file7
```

GIT REMOTE

- Using “git remote -v” command to check repository connect with their local repository to be fetch and push it.

```
MINGW64/c/Users/harharan/downloads/haridevops
hariharan@LAPTOP-JK39PR78 MINGW64 ~
$ mkdir giteve6
mkdir: cannot create directory 'giteve6': File exists

hariharan@LAPTOP-JK39PR78 MINGW64 ~
$ mkdir giteve6
mkdir: cannot create directory 'giteve6': File exists

hariharan@LAPTOP-JK39PR78 MINGW64 ~
$ cd downloads

hariharan@LAPTOP-JK39PR78 MINGW64 ~/downloads
$ mkdir giteve6
mkdir: cannot create directory 'giteve6': File exists

hariharan@LAPTOP-JK39PR78 MINGW64 ~/downloads
$ cd haridevops/
bash: cd: haridevops/: No such file or directory

hariharan@LAPTOP-JK39PR78 MINGW64 ~/downloads
$ git clone https://github.com/hharan1899-lgtm/haridevops.git
Cloning into 'haridevops'...
remote: Enumerating objects: 39, done.
remote: Counting objects: 100% (39/39), done.
remote: Compressing objects: 100% (21/21), done.
remote: Total 39 (delta 11), reused 27 (delta 4), pack-reused 0 (from 0)
Receiving objects: 100% (39/39), 4.16 KiB | 157.00 KiB/s, done.
Resolving deltas: 100% (11/11), done.

hariharan@LAPTOP-JK39PR78 MINGW64 ~/downloads
$ cd haridevops/

hariharan@LAPTOP-JK39PR78 MINGW64 ~/downloads/haridevops (main)
$ git remote -v
origin https://github.com/hharan1899-lgtm/haridevops.git (fetch)
origin https://github.com/hharan1899-lgtm/haridevops.git (push)

hariharan@LAPTOP-JK39PR78 MINGW64 ~/downloads/haridevops (main)
$ |
```

GIT PULL

- Using “git pull origin <branchname>” command to pull remote repository to local repository.

```
MINGW64/c/Users/HARI/downloads/gitrev/todayeve
HARI@LAPTOP-60HJK66L MINGW64 ~/downloads/gitrev/todayeve (feature1)
$ git commit -m "second try"
> AC

HARI@LAPTOP-60HJK66L MINGW64 ~/downloads/gitrev/todayeve (feature1)
$ git commit -m "second try"
[feature1 6139823] second try
1 file changed, 1 insertion(+)
create mode 100644 index.py

HARI@LAPTOP-60HJK66L MINGW64 ~/downloads/gitrev/todayeve (feature1)
$ git push origin feature1
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 290 bytes | 290.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Hari-haran1788/todayeve.git
0d5e42e..6139823 feature1 -> feature1

HARI@LAPTOP-60HJK66L MINGW64 ~/downloads/gitrev/todayeve (feature1)
$ git pull origin feature2
From https://github.com/Hari-haran1788/todayeve
* branch feature2 -> FETCH_HEAD
Already up to date.

HARI@LAPTOP-60HJK66L MINGW64 ~/downloads/gitrev/todayeve (feature1)
$ git switch feature2
```

GIT MERGE

- Using “git checkout feature1” command to switch the branch “git merge feature” command to merge an two branch.

```

MINGW64 ~/giteve6/haridevops
$ git commit -m "Fourthcommit"
[feature 4aa61ad] fourthcommit
1 file changed, 1 insertion(+)
create mode 100644 file12

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature)
$ git push origin feature
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 272 bytes | 136.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/hharan1899-1gtm/haridevops.git
71ba3db..4aa61ad feature -> feature

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature)
$ git log --oneline
4aa61ad (HEAD -> feature, origin/feature) fourthcommit
71ba3db thirdcommit
0e278b7 secondcommit
f815beb firstcommit
401656a (origin/subbranch, origin/main, origin/HEAD, subbranch, main, feature1) sixcommit
568be7e Create hello.py
a79ae6a fifthcommit
4db9c5f fourthcommit
cd6293f thirdcommit
b5588aa secondcommit
015e4ec firstcommit
2221d3c Initial commit

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature)
$ git checkout feature1
Switched to branch 'feature1'

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature1)
$ git log --oneline
401656a (HEAD -> feature1, origin/subbranch, origin/main, origin/HEAD, subbranch, main) sixcommit
568be7e Create hello.py
a79ae6a fifthcommit

MINGW64 ~/giteve6/haridevops
4db9c5f fourthcommit
cd6293f thirdcommit
b5588aa secondcommit
015e4ec firstcommit
2221d3c Initial commit

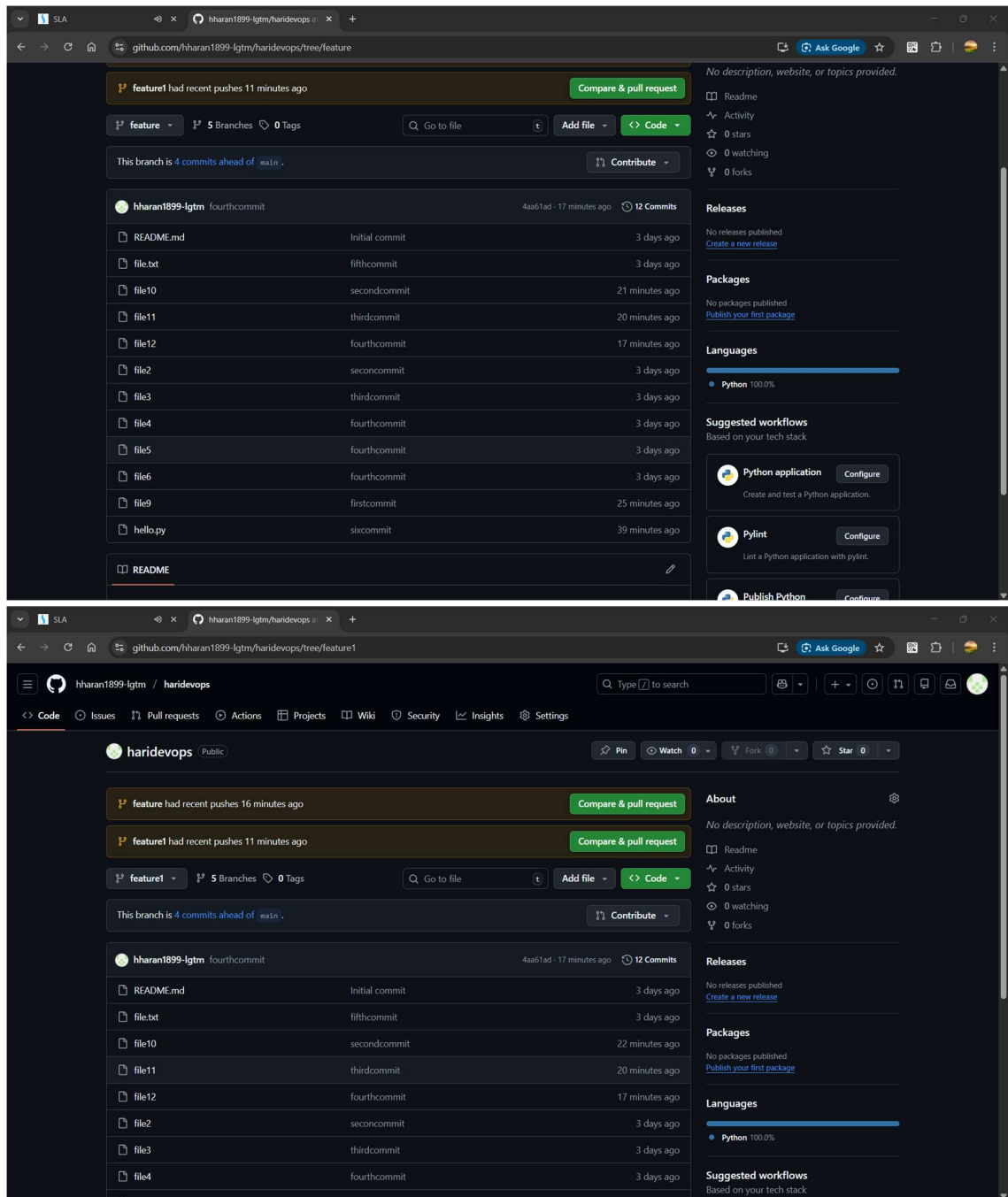
hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature)
$ git checkout feature1
Switched to branch 'feature1'

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature1)
$ git log --oneline
401656a (HEAD -> feature1, origin/subbranch, origin/main, origin/HEAD, subbranch, main) sixcommit
568be7e Create hello.py
a79ae6a fifthcommit
4db9c5f fourthcommit
cd6293f thirdcommit
b5588aa secondcommit
015e4ec firstcommit
2221d3c Initial commit

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature1)
$ git merge feature
Updating 401656a..4aa61ad
Fast-forward
 file10 | 1 +
 file11 | 1 +
 file12 | 1 +
 file9 | 1 +
4 files changed, 4 insertions(+)
create mode 100644 file10
create mode 100644 file11
create mode 100644 file12
create mode 100644 file9

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature1)
$ git log --oneline
4aa61ad (HEAD -> feature1, origin/feature, feature) fourthcommit
71ba3db thirdcommit
0e278b7 secondcommit
f815beb firstcommit

```



GIT REBASE

- Using “git rebase feature3” command to rewrite their commit history.

```
RAHUL - LOQ@RAHUL_LOQ MINGW64 ~/github/devops1 (feature1)
$ git rebase feature3
Current branch feature1 is up to date.
```